## Montana Drought/Precipitation Summary

November 1, 2004

## Montana weather and precipitation summary, October 2004.

Temperatures were generally near normal across Montana for the month of October. Precipitation was variable, with above normal conditions across the northwest and north central, and below normal amounts over much of the southern half and the northeast. The heaviest precipitation fell in two main storms. One storm occurred from about the 14<sup>th</sup>-16<sup>th</sup>, and another from the 21<sup>st</sup>-23<sup>rd</sup>. Snow fell at lower elevations of the north central between the 16<sup>th</sup>-20<sup>th</sup>, with up to two inches at Great Falls. Missoula also recorded two inches on the 18<sup>th</sup>. Over one foot of snow fell over higher elevations in the southwest during the weekend of the 23<sup>rd</sup>-24<sup>th</sup>. Subsequently, the first sub-zero temperature value was recorded at Clover Meadow Snotel on the morning of the 25<sup>th</sup>, reaching -3°F. Winds continued below the 30-year average across the state. A 78 mph gust was recorded near East Glacier on the 30<sup>nd</sup>, while Logan Pass reached 101 mph the same day.

## Historical Rank of Precipitation (inches) for the Past Month and Water Year to Date

Location	Oct 1 - Oct 31	% of Normal	Oct 1 - Oct 31	% of Normal	Rank	Percentile	Years of Record
Billings	1.67	126	1.67	126	! 14 <sup>th</sup> wettest	80 <sup>th</sup>	71
Bozeman	1.22	111	1.22	111	20 <sup>th</sup> wettest	67 <sup>th</sup>	62
Butte	0.33	42	0.33	42	26 <sup>th</sup> driest	24 <sup>th</sup>	106
Cut Bank	0.93	198	0.93	198	16 <sup>th</sup> wettest	84 <sup>th</sup>	97
Dillon	0.88	138	0.88	138	14 <sup>th</sup> wettest	76 <sup>th</sup>	59
Glasgow	0.47	66	0.47	66	54 <sup>th</sup> driest	50 <sup>th</sup>	108
Great Falls	1.05	113	1.05	113	31 <sup>st</sup> wettest	72 <sup>nd</sup>	112
Havre	0.67	108	0.67	108	49 <sup>th</sup> wettest	60 <sup>th</sup>	125
Helena	0.41	62	0.41	62	51 <sup>st</sup> driest	41 <sup>st</sup>	124
Kalispell	1.48	154	1.48	154	42 <sup>nd</sup> wettest	77 <sup>th</sup>	106
Lewistown	1.20	113	1.20	113	45 <sup>th</sup> wettest	57 <sup>th</sup>	104
Livingston	1.87	156	1.87	156	16 <sup>th</sup> wettest	84 <sup>th</sup>	102
Miles City	1.56	138	1.56	138	45 <sup>th</sup> wettest	60 <sup>th</sup>	112
Missoula	0.55	66	0.55	66	33 <sup>rd</sup> driest	31 <sup>st</sup>	108

For an automated version of this chart, updated daily, go to http://www.wrh.noaa.gov/cgi-bin/greatfalls/getproduct.pl?PCPNTOTALS

For a state map of % of normal water year precipitation (updated around the 7<sup>th</sup> of each month), go to: <a href="http://www.wrh.noaa.gov/Greatfalls/tfx.php?TEXT+wateryear\_percent.html">http://www.wrh.noaa.gov/Greatfalls/tfx.php?TEXT+wateryear\_percent.html</a>

For the latest information on mountain snow pack from the NRCS, go to: <a href="http://www.mt.nrcs.usda.gov/snow/index.html">http://www.mt.nrcs.usda.gov/snow/index.html</a>

For the latest U.S. Drought Monitor, issued weekly by the Climate Prediction Center (CPC), go to: <a href="http://www.drought.unl.edu/dm/monitor.html">http://www.drought.unl.edu/dm/monitor.html</a>

## Montana precipitation/temperature forecast.

As of November 1<sup>st</sup>, the CPC November temperature forecast is a 50 to 55% chance of warmer than normal conditions. The November precipitation forecast is for equal chances of wetter or drier than normal conditions. For the period November through January, the forecast calls for a 55 to 60% chance of above normal temperatures and equal chances of above or below normal precipitation over the state. Graphics and text relating to these outlooks, and additional long-range forecasts can be found at

http://www.cpc.ncep.noaa.gov/products/predictions/multi\_season/13\_seasonal\_outlooks/color/seasonal\_forecast.html

Further inquiries about the moisture conditions can be directed to Dave Bernhardt or Gina Loss at (406) 453-2081. Many more links can be found on the Drought Information Page of the NWS Great Falls web site at <a href="http://www.wrh.noaa.gov/Greatfalls/tfx.php?HTML+drought">http://www.wrh.noaa.gov/Greatfalls/tfx.php?HTML+drought</a>